

Amendments to the Claims

1. (original) A diesel engine having at least one bank of cylinders with at least one inlet valve and at least one exhaust valve per cylinder, comprising:
a first camshaft for the inlet valve, said first camshaft controlling the opening of the inlet valve; and
a second camshaft for the inlet valve, said second camshaft controlling the closing time of the inlet valve; and
a camshaft phasing mechanism coupled to said second camshaft.
2. (original) The diesel engine of claim 1 wherein said camshaft phasing mechanism is capable of delaying the closing time of said inlet valve up to 60 crank angle degrees.
3. (original) The diesel engine of claim 1 wherein said first and second camshafts are parallel to and adjacent to each other.
4. (original) The diesel engine of claim 3, further comprising:
a first drive coupled to said first camshaft; and
a second drive coupled to said second camshaft wherein said first and second drives are arranged at opposite ends of said parallel camshafts.
5. (original) The diesel engine of claim 1, further comprising: an engine timing unit coupled to said camshaft phasing mechanism.
6. (original) The diesel engine of claim 5 wherein closing time of said inlet valve is controlled by said engine timing unit controlling said camshaft phasing mechanism.
7. (original) The diesel engine of claim 6 wherein said closing time of said inlet valve is adjusted based on an engine speed.
8. (original) The diesel engine of claim 6 wherein said closing time of said inlet valve is adjusted based on an engine torque.

9. (original) The diesel engine of claim 1, further comprising: a turbocharger coupled the engine.

10. (original) The diesel engine of claim 9 wherein said closing time of said inlet valve is adjusted based on a charging pressure of said turbocharger.

11. (original) The diesel engine of claim 1 wherein the first camshaft controls opening and closing times of the exhaust valve.

12. (original) The diesel engine of claim 1, further comprising: a third camshaft for the exhaust valve, said third camshaft controlling an opening and closing time of the exhaust valve.

13. (original) A method for controlling valve timing in a diesel engine, the engine having at least one cylinder and at least one inlet valve and at least one exhaust valve per cylinder, the engine also having a first camshaft for controlling the opening of the inlet valve and a second camshaft for controlling the closing of the inlet valve, the method comprising: adjusting closing time of the inlet valve based on an engine speed wherein said adjustment is effected by a camshaft phaser coupled to the second camshaft.

14. (original) The method of claim 13, further comprising: adjusting closing time of the inlet valve based on an engine torque.

15. (original) The method of claim 13 wherein the engine has a turbocharger coupled thereto, the method further comprising: adjusting closing time of the inlet valve based on a charging pressure of said turbocharger.

16. (original) The method of claim 13 wherein the camshaft phasing mechanism is capable of delaying the closing time of said inlet valve up to 60 crank angle degrees.